

October 11, 2006: Everett Remarks to the Strategic Space and Defense Conference

Remarks

The Honorable Terry Everett

Chairman, Strategic Forces Subcommittee

Strategic Space and Defense Conference

Space: The Strategic Enabler

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Good afternoon. I am honored to be here today. The Space Foundation has done a terrific job planning this conference, and bringing together this talented and diverse group of people to focus on our strategic capabilities. Today, I would like to share my views on both the challenges and opportunities we face as a strategic forces community.

Yesterday afternoon I met with General Cartwright at STRATCOM to discuss his initiatives in the areas of space, missile defense, global strike, and command and control.

Earlier today, I walked around the exhibit hall. It was a great opportunity for me to talk with industry representatives and see the latest in technology and innovation. Congress has been vocal on the need for fielding near-term capabilities to support today's warfighters and decision-makers. I'm pleased to say that I saw a real focus on providing solutions for today's forces.

There is a theme that this conference highlights for me - the important role of space as an enabler for our strategic capabilities. I firmly believe our future national and economic security is so closely tied to our advances in space, that I have placed considerable emphasis on space within the strategic forces subcommittee. The subcommittee's oversight activities include frequent briefings and hearings, both unclassified and classified, visits to aerospace facilities, and discussions with key government and industry leaders.

We don't undertake space for space's sake. The contribution of space is, and will be, vital to our nation's: Strategic missile defense; Prompt global strike capabilities; Other defense and intelligence missions; Homeland security; Diplomacy; and The economy.

As a result of our nation's leadership in space, and the advantage space provides our strategic forces, we will continue to be tested by emerging threats and our own internal challenges within the national security space community.

With that back drop, I'd like to speak about three topics today: The contribution of space to our national and economic security; Protecting our national interests in space; and Challenges within the national security space enterprise.

I. BENEFITS OF SPACE

The secret is out. America is very reliant on space and will continue to be for the foreseeable future. Space-based capabilities have provided countless benefits across our defense, intelligence, diplomatic, and economic domains.

For our military, space has revolutionized the way we fight. I like to use the example showing the number of sorties and bombs it took in World War II to hit one target versus where we are today. 1,500 B-17 sorties and 9,000 250 pound bombs in World War II.

This past June, Al Qaida leader al-Zarqawi was targeted with one F-15 sortie and two 500 pound bombs.

This successful strike mission was heavily reliant on space, and included: High-resolution satellite imagery and other intelligence to geo-locate the target within meters; Satellite communications to the cockpit for real-time updates; and GPS-guided precision munitions to minimize collateral damage.

For intelligence and diplomacy, space will continue the critical role it has played since the Cold War. Among the more prominent threats we face today are the missile and W-M-D efforts of North Korea and Iran. Recent events - the July North Korean launch of seven missiles, including one long-range missile, the ongoing confrontation with the Iranian regime regarding its nuclear program, and Monday's suspected nuclear test by North Korea - only underscore these threats.

NATIONAL SECURITY SPACE AND MISSILE DEFENSE

A cornerstone of our strategic posture to address these threats is a robust missile defense system; one that is heavily reliant on space. One of the best examples I can give is to highlight the recent test on September 1st of our ground-based midcourse defense system, which successfully intercepted a test target.

Among the space assets used to support this test were: D-S-P missile warning satellites, through their global coverage and access, providing launch detection and early warning data; Satellite communications relaying data from distributed collectors, and providing networked command and control connectivity between decision-makers and operators; and In a real world situation, space-based intelligence collectors would also be leveraged to provide early indications and warning of an impending missile event.

This test demonstrated how space - together with...Air, sea, and land-based assets; Data processing; Communications; Command and control; and Trained operators... work together as a unified system to detect, track, and engage a missile to intercept.

I am encouraged by this test, but recognize the need for more testing. Because it's more than just getting the interceptors to work; it's getting all elements of our multi-layer missile defense system to work together.

NAT'L SECURITY SPACE & PROMPT GLOBAL STRIKE

Looking into the future, the D-O-D has an effort underway to develop mid- and long-term prompt global strike capabilities. P-G-S would allow us to go after time sensitive, fleeting targets. However, the end-to-end concepts and capabilities are still being developed. Much remains to be done in formulating a clear path for the future, as noted by Congressional language on the Conventional Trident Modification and advanced hypersonics programs.

What I can comment on with certainty, is that space will provide a significant contribution to any prompt global strike capability, through accurate intelligence, precise geo-location and targeting, and real-time tracking and battle damage assessment.

II. SPACE AND THE ECONOMY

The importance of space extends far beyond the military into our daily lives. However, I believe Congress and the American public are largely unaware of how space services contribute to our daily commerce and broader economic security.

Satellites enable: True global connectivity, media distribution, financial transactions, package deliveries, pay-at-the-pump services, weather tracking, and crop monitoring. Support to first responders, and planning for natural disasters and recovery missions. New industries and new technology applications, such as Google Earth, in-car navigation, and satellite radio have also emerged.

Clearly, we need to examine what the growing importance of space means to our national, and in particular, our economic interests. We must also strive to better understand the threats to space and the consequences if we lose space assets.

My subcommittee remains active in these areas: This summer, we held a hearing on the importance of space to the nation - both its military and economic aspects. We wanted a wide-ranging perspective, which is why I invited U.S.

STRATCOM, as well as representatives from the Department of Commerce, industry, and academia.

Although difficult to quantify, witnesses discussed the extent and magnitude to which our military operations, homeland security, and overall economy depend on space and the impact of the loss of key space assets. One witness noted, for example, that satellites contribute over 90 billion dollars to the global economy.

We have also held several closed sessions and received a number of classified briefings to gain the greatest possible perspective on these issues.

Unless our nation truly understands our dependence on space, we cannot understand the risks. The legislation we passed a few weeks ago includes a provision for the Air Force's National Space Studies Center to examine just this topic.

PROTECTING U.S. INTERESTS IN SPACE

As I've just outlined, space is a key enabler for a multitude of critical missions and economic sectors. Protecting our capabilities and interests in space is more important than ever.

The ever-present and growing threat serves to reinforce, in my mind, a sense of urgency. These threats include: Jamming; Laser "dazzling;" Micro-satellites; Direct ascent ASATs; Cyber attacks; Physical attacks to ground stations; and Possibly even a nuclear explosion.

Additionally, space systems are vulnerable to less malicious threats, such as space debris, solar flares, and severe weather damaging ground stations.

Our adversaries recognize the advantage space offers the U.S., and are more willing to attack that advantage using a wide range of methods. Contrary to some views, space is no longer a sanctuary.

During the Cold War, the Soviets had several anti-satellite capabilities, but they understood that an attack on our satellites was a possible prelude to nuclear war.

Today's environment has changed. In the past few years, we've seen a handful of SATCOM jamming incidents with few repercussions for the perpetrators.

In the early stages of Operation Iraqi Freedom, U.S. forces dealt with GPS jamming. In this case, we hit these jamming sources dead-on.

Also, numerous reports have cited the growing abilities of several other nations, including China, to develop capabilities that could threaten U.S. satellites.

The broad issues of space protection, survivability, and how we protect our capabilities warrants a serious discussion and debate. There are a whole host of options and courses of action that we need to consider, each with its advantages and disadvantages: Rapid replenishment; Redundancy; Hardening; Distributed architectures; Alternatives such as U-A-Vs; Active prevention and denial; Reversible and non-reversible means; and Non-material solutions.

First and foremost, we need to develop robust space situational awareness, or S-S-A, capabilities. As we learned on 9-11, seemingly benign systems can have offensive capabilities.

An object that appears to be orbital debris or a research satellite may, in fact, be an ASAT targeted at U.S. or friendly assets.

Likewise, noise in a data link may be accidental interference or intentional jamming. Also, harmless debris can pose big risks to assets such as our space shuttle.

These are not easy problems. Knowing the difference and knowing when to take action demands that we have robust S-S-A. Bottom-line, we are limited in what we can do in space without knowing: What is the state of play; and Who is doing what to whom.

S-S-A and options for protecting our space interests must all be examined and weighed as part of a space protection strategy. This strategy should encompass the desired mix of active and passive capabilities, using material and non material methods.

I recognize we will not be able to protect, nor can we afford to protect, all systems to the same level. Therefore, risk management, informed by our knowledge of threats and vulnerabilities, should be our guide.

III. CHALLENGES WITHIN THE NATIONAL SECURITY SPACE ENTERPRISE

Finally, what is the state of our national security space enterprise? We have real challenges before us that affect the way we do the business of national security space. If left unaddressed, they can pose just as great a risk to our success and security as those of the threats I discussed earlier. Our success in space hinges on four areas in particular:

- 1.) Identifying opportunities for collaboration;
- 2.) Fostering new and innovative approaches, through initiatives such as Operationally Responsive Space;
- 3.) Improving the business of space acquisitions; and
- 4.) Cultivating the workforce.

Our military forces are facing outstanding demands in multiple areas, like: Force sustainment; Modernization; Cost growth across programs; and Budget pressures.

These demands will have significant impacts for the shape of our future space enterprise and affordability of our space portfolio. Therefore, the community must think differently about how space can support our dynamic security environment.

CROSS-COMMUNITY COLLABORATION

Expensive new start programs will be harder to initiate. The development and operations of strategic space and defense systems are too complex and costly for any one organization to go it alone. At the end of the day, we must be mindful that there is one set of national needs and one bill for the taxpayer to foot.

Therefore, I encourage government and industry to identify: Areas for collaboration; and Capabilities they can leverage from other domains and organizations.

For example, I believe there could be far more opportunities to leverage systems, data, and expertise across the space and missile defense domains. A logical starting point is to identify ways to better share data and information across mission areas.

OPERATIONALLY RESPONSIVE SPACE

We must also embrace innovative ways to advance our strategic enterprise. One innovative approach to getting key space capabilities into the hands of our military forces is Operationally Responsive Space.

O-R-S is an effort to develop smaller, less expensive satellites that can launch on short notice to meet the immediate needs of the warfighter.

In this year's defense bill, Congress created a joint O-R-S program office, bringing together: Science and technology; Acquisition; Operations; and Warfighter support.

With this effort, I see a stronger national security space portfolio where O-R-S systems complement large traditional space programs.

For this Office to be successful it must retain a strong joint core, bringing together leaders and participants from across the Services, Agencies, research labs, and industry. It must also create an environment that expects and rewards innovation.

I said earlier that the strain of rising costs and affordability will continue to put pressure on our space and defense programs. At the same time, technologies are evolving at much higher rates than our current ten-plus year acquisition timelines. Therefore, I see two key thrusts to O-R-S:

First, it is a means to get simple, low cost solutions rapidly on-orbit to meet the dynamic needs of our combatant commanders; Secondly, it provides more frequent opportunities to prove-out innovative concepts and technologies at a lower cost, while strengthening our industrial base and technical workforce.

I've said low-cost twice. I can't emphasize this enough; we must control the costs of our space programs.

SPACE ACQUISITION

For space capabilities to be available when we need them, we must improve space acquisition. These systems are part of a much larger defense-wide architecture, which means that delays in critical space programs can have ripple effects on other capabilities. The importance of space demands that we be successful in our acquisitions and deliver on what is promised. I am concerned that the current track we are on is not sustainable:

These programs are difficult, and I know that many of you work hard at getting it right. Collectively, we can do better. Government and industry must increase confidence in cost estimating, mitigating risk, quality control, and improving systems engineering. Congress must do better to provide constant and reliable funding for these programs. If we are ever to see the benefits of Operationally Responsive Space, we must have a responsive acquisition infrastructure. I am encouraged by Dr. Sega's "Back-to-Basics" approach, and look forward to seeing its implementation in the larger national security space strategy.

We need to work together to get this right. We need to equip our men and women with the best warfighter capabilities, but they must be affordable and executable.

SPACE CADRE

I would like to close with a subject that should really be at the top of the list - people. It starts with people and ends with people. This is my priority and a Congressional priority. Everything we do and want to do in space requires top-notch individuals. This isn't rhetoric with me. I am deeply concerned with the Air Force reductions in personnel to pay for modernization.

I am even more concerned that these cuts may affect the science, engineering, and acquisition workforce - the very people whose technical savvy and creativity we need for modernization.

As the Air Force moves forward with these cuts, I expect to see increased transparency into the decision-making and a detailed strategy on how we plan to make the force we have even smarter, better equipped, and set with a clear career path to be the next generation of leaders in strategic space and defense.

CLOSING

Lastly, I would like to thank the service men and women here today. I am proud to have worn the uniform many years ago. It's good to see so many junior and mid-career officers here to meet and share ideas with government leaders and industry.

I am committed to advancing U.S. leadership in space. But we have real challenges to work through if we are to maintain this edge and assure space assets are available to support our nation's strategic missions.

We must better understand and meet the threats posed by our adversaries through more comprehensive S-S-A and protection strategies.

Let me be clear. It is my opinion that we will use whatever means necessary to protect our assets in space, whether reversible or non-reversible.

We must also overcome obstacles within our space enterprise by increasing collaboration, improving acquisition, enhancing our cadre, and fostering real innovation.

Advancing U.S. space leadership is a multi-dimensional challenge, and will require all of us working together. To this end, I look forward to working with each of you as we move forward in strategic space and defense.

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